

**SOLICITED PROPOSAL APPLICATION FOR THE NASA OLMSA
MICROGRAVITY RESEARCH DIVISION**

IN RESPONSE TO ANNOUNCEMENT NRA-00-HEDS-02

PLEASE FOLLOW INSTRUCTIONS CAREFULLY

LEAVE BLANK

1. COMPLETE TITLE OF PROJECT

2. PRINCIPAL INVESTIGATOR (First, middle, and last name; degrees; position)

3. COMPLETE MAILING ADDRESS

 Internal Mail Code or Location
Office or Organization Division
Agency/Center, Company, or Institution
Street or P.O. Box
City, State Zip Code

 4. TELEPHONE NUMBER
(area code, number, extension)

 FAX NUMBER
E-MAIL ADDRESS

5. CONGRESSIONAL DISTRICT (U.S. ONLY)

6. SOCIAL SECURITY # (U.S. ONLY)

 7. THIS PROPOSAL IS: ☐ NEW ☐ RENEWAL ☐ REVISED

8. HAS THIS PROPOSAL (OR SIMILAR REQUEST) BEEN SUBMITTED TO ANY OTHER AGENCY?

☐ No ☐ Yes IF YES, SPECIFY AGENCY AND YEAR SUBMITTED:

9. CO-INVESTIGATORS (First, middle, and last name; degrees)

10. CO-INVESTIGATOR'S ORGANIZATION

 11. DATES OF ENTIRE PROPOSED
PROJECT PERIOD

 From: For years of
Through: support (4 yr. Max.)

12. PROPOSED COST FOR EACH YEAR

 12a. Year 1 12b. Year 2
12c. Year 3 12d. Year 4

 13. COSTS REQUESTED FOR
ENTIRE PROPOSED
PROJECT PERIOD

14. APPLICANT ORGANIZATION (Organization Name)

15. TYPE OF ORGANIZATION (U.S. ONLY)

☐ Non Profit ☐ For Profit (General) ☐ For Profit (Small Business) ☐ Public, Specify: ☐ Federal ☐ State ☐ Local

 16. ORGANIZATION OFFICIAL TO BE NOTIFIED IF AN AWARD IS
MADE (Name, title, address, and telephone number)

 17. OFFICIAL SIGNING FOR APPLICANT
ORGANIZATION (Name, title, and telephone number)

18. PRINCIPAL INVESTIGATOR/PROGRAM DIRECTOR ASSURANCE:

I agree to accept responsibility for the scientific conduct of the project and to provide the required progress reports if a grant is awarded as a result of this application. Willful provision of false information is a criminal offense (U.S. Code, Title 18, Section 1001).

 SIGNATURE OF PERSON NAMED IN 2
(In ink; "Per" signature not acceptable.)

DATE

 19. CERTIFICATION AND ACCEPTANCE: By submitting the proposal identified in this Cover Sheet/Proposal Summary in response to NRA 00-HEDS-02, the Authorizing Official of the proposing institution (or the individual proposer if there is no proposing institution):
1) certifies that the statements made in this proposal are true and complete to the best of his/her knowledge; 2) agrees to accept the obligations to comply with the sponsoring agency award terms and conditions if an award is made as a result of this proposal; and 3) if the applicant organization is an entity of the United States of America, confirms compliance with all provisions, rules, and stipulations set forth in the three Certifications contained in this NRA [namely, i) Certification Regarding Debarment, Suspension, and Other Responsibility Matters Primary Cover Transactions, ii) Certification Regarding Lobbying, and iii) Certification of Compliance with the NASA Regulations Pursuant to Nondiscrimination in Federally Assisted Programs]. Willful provision of false information in this proposal and/or its supporting documents, or in reports required under an ensuing award, is a criminal offense (U.S. Code, Title 18, Section 1001).

 SIGNATURE OF PERSON NAMED IN 19
(or person named in 2, if there is no proposing institution)
(In ink; "Per" signature not acceptable.)

DATE

PROPOSAL EXECUTIVE SUMMARY

Principal Investigator: _____

Co-Investigators: _____

Proposal Title: _____

Ground-based

☐

Flight Research

☐

Executive Summary

Prepare a brief description of the proposal stating the broad, long-term objectives and specific aims of the proposed work. Describe concisely the research design and methods for achieving these objectives and aims. This executive summary is meant to serve as a succinct and accurate description of the proposed work when separated from this application. Limit Executive Summary to two pages or less.

PRINCIPAL INVESTIGATOR: _____

| BUDGET FOR ENTIRE PROJECT PERIOD DIRECT COSTS ONLY | | | | | |
|---|--------------|-------------------------------|---------------------------------------|-----------------|-----------------|
| BUDGET CATEGORY TOTALS | | 1 st BUDGET PERIOD | ADDITIONAL YEARS OF SUPPORT REQUESTED | | |
| | | | 2 nd | 3 rd | 4 th |
| PERSONNEL (Salary and Fringe Benefits) (Applicant organization only) | | | | | |
| SUBCONTRACTS | | | | | |
| CONSULTANT COSTS | | | | | |
| EQUIPMENT | | | | | |
| SUPPLIES | | | | | |
| TRAVEL | DOMESTIC | | | | |
| | NON-DOMESTIC | | | | |
| OTHER EXPENSES | | | | | |
| TOTAL DIRECT COSTS FOR EACH PERIOD | | | | | |
| TOTAL INDIRECT COSTS FOR EACH PERIOD | | | | | |
| TOTAL DIRECT + INDIRECT COSTS FOR EACH PERIOD | | | | | |
| TOTAL DIRECT + INDIRECT COSTS FOR ENTIRE PROJECT | | | | | |

JUSTIFICATION FOR UNUSUAL EXPENSES (Detail Justification in Cost Section of Proposal)

SUMMARY PROPOSAL BUDGET

FORM D

| | | | | |
|--|------------------------------|------|-------------------------------|----------------------------|
| ORGANIZATION | | | | |
| PRINCIPAL INVESTIGATOR | | | | |
| A. SENIOR PERSONNEL: PI, Co-Is, Faculty and Other Senior Associates (List each separately with title, A.7. Show number in brackets) | NASA-Funded Person-months | | | Funds Requested By |
| | CAL | ACAD | SUMR | Proposer |
| 1. | | | | \$ |
| 2. | | | | |
| 3. | | | | |
| 4. | | | | |
| 5. | | | | |
| 6. () OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE) | | | | |
| 7. () TOTAL SENIOR PERSONNEL (1-6) | | | | |
| B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS) | | | | |
| 1. () POST DOCTORAL ASSOCIATES | | | | |
| 2. () OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.) | | | | |
| 3. () GRADUATE STUDENTS | | | | |
| 4. () UNDERGRADUATE STUDENTS | | | | |
| 5. () SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY) | | | | |
| 6. () OTHER | | | | |
| TOTAL SALARIES AND WAGES (A + B) | | | | |
| C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS) | | | | |
| TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C) | | | | |
| D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.) | | | | |
| TOTAL EQUIPMENT | | | | |
| E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS) | | | | |
| 2. FOREIGN | | | | |
| F. PARTICIPANT SUPPORT COSTS | | | | |
| 1. STIPENDS \$ | Not Applicable to this NRA | | | |
| 2. TRAVEL | | | | |
| 3. SUBSISTENCE | | | | |
| 4. OTHER | | | | |
| () TOTAL PARTICIPANT COSTS | | | | |
| G. OTHER DIRECT COSTS | | | | |
| 1. MATERIALS AND SUPPLIES | | | | |
| 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION | | | | |
| 3. CONSULTANT SERVICES | | | | |
| 4. COMPUTER SERVICES | | | | |
| 5. SUBAWARDS | | | | |
| 6. OTHER | | | | |
| TOTAL OTHER DIRECT COSTS | | | | |
| H. TOTAL DIRECT COSTS (A THROUGH G) | | | | |
| I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE) | | | | |
| TOTAL INDIRECT COSTS (F&A) | | | | |
| J. TOTAL DIRECT AND INDIRECT COSTS (H + I) | | | | |
| K. RESIDUAL FUNDS | | | | Not Applicable to this NRA |
| L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K) | | | | Not Applicable to this NRA |
| M. COST-SHARING: PROPOSED LEVEL \$ | | | AGREED LEVEL IF DIFFERENT: \$ | |
| PI TYPED NAME AND SIGNATURE | | | DATE | |
| ORG. REP. TYPED NAME & SIGNATURE | | | DATE | |

INSTRUCTIONS FOR USE OF SUMMARY PROPOSAL BUDGET (NASA FORM D)

1. General

- a. Each grant proposal must contain a Summary Proposal Budget in this format unless a pertinent program announcement/solicitation specifically provides otherwise.
- b. Copies of NASA Form D and instructions may be reproduced locally.
- c. A separate form should be completed for each year of support requested.
- d. Completion of this summary does not eliminate the need to document and justify the amounts requested in each category. Such documentation should be provided on additional page(s) immediately following the budget in the proposal and should be identified by line item. The documentation page(s) should be titled "Budget Justification Page."
- e. If a revised budget is required by NASA, it must be signed and dated by the Authorized Organizational Representative and Principal Investigator and submitted in at least the original and two copies.

2. Budget Line Items

The following is a brief outline of budget documentation requirements by line item. (NOTE: All documentation, justification required on the line items below should be provided on the Budget Justification Page(s).)

A., B., and C. *Salaries, Wages and Fringe Benefits.* List individually, all senior personnel who were grouped under Part A, the requested person-months to be funded and rates of pay.

D. *Equipment.* Items exceeding \$5,000 and 1 year's useful life are defined as permanent equipment (unless lower thresholds are established by the organization). List item and dollar amount for each item. Justify.

E. *Travel.* Address the type and extent of travel and its relation to the project. Itemize by destination and cost and justify travel outside the United States. Include dates of foreign visits or meetings. Fare allowances are limited to round trip, jet-economy rates.

G. *Other Direct Costs.*

1. Materials and Supplies. Indicate types required and estimate costs.
2. Publication, Documentation and Dissemination. Estimate costs of documenting, preparing, publishing, disseminating, and sharing research findings.
3. Consultant Services. Indicate name, daily compensation, and estimated days of service, and justify.
4. Computer Services. Include justification based on estimated computer service rates at the proposing institution. Purchase of equipment should be included under D.
5. Subawards. Also include a complete budget NASA Form D for each subaward and justify details.
6. Other. Itemize and justify. Include computer equipment leasing.

I. *Indirect Costs* (Also known as Facilities and Administrative Costs for Colleges and Universities). Specify current rate(s) and base(s). Use current rate(s) negotiated with the cognizant Federal negotiating agency.

PROPOSERS MUST NOT ALTER OR REARRANGE THE COST CATEGORIES AS THEY APPEAR ON THIS FORM WHICH HAS BEEN DESIGNED FOR COMPATIBILITY WITH DATA CAPTURE BY NASA. IMPROPER COMPLETION OF THIS FORM MAY RESULT IN RETURN OF PROPOSAL.

CHECKLIST FOR PROPOSERS

This checklist should be annotated to indicate that the stated items have been included in the proposal package.
The proposal should also be submitted in this order.

Principal Investigator/Program Director:

- | | |
|---|--|
| 1. <input type="checkbox"/> Form A: Solicited Proposal Application* | 7. <input type="checkbox"/> Letter of Assurance of Foreign Support (if applicable) |
| 2. <input type="checkbox"/> Form B: Proposal Executive Summary | 8. <input type="checkbox"/> Facilities and Equipment Description |
| 3. <input type="checkbox"/> Form C: Summary Budget Form | 9. <input type="checkbox"/> Budget Justification Page |
| 4. <input type="checkbox"/> Form D: Detailed 12 Month Budget Summary (one form for each year of support and each sub-award/sub-contract) | 10. <input type="checkbox"/> Appendices, if any |
| 5. <input type="checkbox"/> Project Description | 11. <input type="checkbox"/> 15 copies of all material listed above |
| 6. <input type="checkbox"/> Management Approach | |

* One signed original required

Only one copy of the following needs to be submitted:

- ☐ 3.5 inch computer diskette
- ☐ Form E: This checklist indicates all applicable items have been enclosed.

**CERTIFICATION REGARDING
DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS
PRIMARY COVERED TRANSACTIONS**

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 14 CFR Part 1269.

A. The applicant certifies that it and its principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three-year period preceding this application been convicted or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or Local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or Local) with commission of any of the offenses enumerated in paragraph A.(b) of this certification; and
- (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or Local) terminated for cause or default; and

B. Where the applicant is unable to certify to any of the statements in this certification, he or she shall attach an explanation to this application.

C. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lowered Tier Covered Transactions (Subgrants or Subcontracts)

- (a) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principles is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department of agency.
- (b) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

This page has been included for your information. Do not submit this page with your application. Item 19 of Form A satisfies the requirement of compliance with the provisions, rules, and stipulations described on this page.

CERTIFICATION REGARDING LOBBYING

As required by S 1352 Title 31 of the U.S. Code for persons entering into a grant or cooperative agreement over \$100,000, the applicant certifies that:

- (a) No Federal appropriated funds have been paid or will be paid by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, in connection with making of any Federal grant, the entering into of any cooperative, and the extension, continuation, renewal, amendment, or modification of any Federal grant or cooperative agreement;
- (b) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting an officer or employee of any agency, Member of Congress, an or an employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (c) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subgrants, contracts under grants and cooperative agreements, and subcontracts), and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by S1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

This page has been included for your information. Do not submit this page with your application. Item 19 of Form A satisfies the requirement of compliance with the provisions, rules, and stipulations described on this page.

**CERTIFICATION OF COMPLIANCE WITH THE NASA REGULATIONS
PURSUANT TO
NONDISCRIMINATION IN FEDERALLY ASSISTED PROGRAMS**

The (Institution, corporation, firm, or other organization on whose behalf this assurance is signed, hereinafter called "Applicant") hereby agrees that it will comply with Title VI of the Civil Rights Act of 1964 (P.L. 88-352), Title IX of the Education Amendments of 1962 (20 U.S. 1680 et seq.), Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S. 794), and the Age Discrimination Act of 1975 (42 U.S. 16101 et seq.), and all requirements imposed by or pursuant to the Regulation of the National Aeronautics and Space Administration (14 CFR Part 1250) (hereinafter called "NASA") issued pursuant to these laws, to the end that in accordance with these laws and regulations, no person in the United States shall, on the basis of race, color, national origin, sex, handicapped condition, or age be excluded from participating in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Applicant receives federal financial assistance from NASA; and hereby give assurance that it will immediately take any measure necessary to effectuate this agreement.

If any real property or structure thereon is provided or improved with the aid of federal financial assistance extended to the Applicant by NASA, this assurance shall obligate the Applicant, or in the case of any transfer of such property, any transferee, for the period during which the real property or structure is used for a purpose for which the federal financial assistance is extended or for another purpose involving the provision of similar services or benefits. If any personal property is so provided, this assurance shall obligate the Applicant for the period during which the federal financial assistance is extended to it by NASA.

This assurance is given in consideration of and for the purpose of obtaining any and all federal grants, loans, contracts, property, discounts, or other federal financial assistance extended after the date hereof to the Applicant by NASA, including installment payments after such date on account of applications for federal financial assistance which were approved before such date. The Applicant recognized and agrees that such federal financial assistance will be extended in reliance on the representations and agreements made in this assurance, and the United States shall have the right to seek judicial enforcement of this assurance. His assurance is binding on the Applicant, its successors, transferees, and assignees, and the person or persons whose signatures appear below are authorized to sign on behalf of the Applicant.

This page has been included for your information. Do not submit this page with your application. Item 19 of Form A satisfies the requirement of compliance with the provisions, rules, and stipulations described on this page.